# **Filters and Limiters**

## Limiters



HP 11867A



#### HP 11867A and 11693A

These limiters can be used to protect the input circuits of spectrum analyzers, counters, amplifiers, and other instruments from high power levels with minimal effect on measurement performance. The HP 11867A RF limiter (dc to 1800 MHz) reflects signals up to 10 watts average power and 100 watts peak power. Insertion loss is less than 0.75 dB. The HP 11693A microwave limiter (0.1 to 12.4 GHz, useable to 18 GHz) guards against input signals over 1 milliwatt up to 1 watt average power and 10 watts peak power.



## Filters

## HP 11668A

This high pass filter is recommended for making measurements on active devices that have high gain below 50 MHz. Use of this filter, with the HP 11665B modulator, reduces the modulation drive feedthrough from 8 mV to 1 mV and helps prevent amplifier saturation.

#### Specifications

Frequency Range	Return Loss	Insertion Loss
50 to 100 MHz	≥12 dB	≤2.5 dB
100 MHz to 8 GHz	≥16 dB	≤1.0 dB
8 to 12 GHz	≥14 dB	≤1.0 dB
12 to 18 GHz	≥14 dB	≤1.5 dB

Maximum Input: +27 dBm Connectors: N (f), N (m) Shipping Weight: 0.28 kg (10 oz)



#### **HP 0955-0759 50** $\Omega$ **Band Pass Filter**

This 50  $\Omega$  band pass filter has a center frequency of 175 MHz, a 3 dB bandwidth of 150 to 200 MHz, and 50 dB stop band rejection. Insertion loss is 2.5 dB, SWR is 2:1 and connectors are type-N (f) to N (m).

# **HP 0955-0760 75** $\Omega$ **Band Pass Filter**

This 75  $\Omega$  band pass filter has a center frequency of 175 MHz, a 3 dB bandwidth of 150 to 200 MHz, and 50 dB stop band rejection. Insertion loss is 2.5 dB, SWR is 2:1 and connectors are type-N (f) to N (m).

